

**Practice B**

For use with pages 100–107

Use the distributive property to rewrite the expression without parentheses.

- |                      |                                       |                       |
|----------------------|---------------------------------------|-----------------------|
| 1. $-6(x + 5)$       | 2. $(y - 7)8$                         | 3. $-(4 - t)$         |
| 4. $(r - 3)(-4)$     | 5. $m(m - 1)$                         | 6. $-n(3 + n)$        |
| 7. $(3x - 4)(-2)$    | 8. $(-2a)(a + 3)$                     | 9. $(-1 + x)(5x)$     |
| 10. $(-6b - 2)(-3b)$ | 11. $-8(-\frac{5}{8}x + \frac{3}{4})$ | 12. $(2 - 3y)(-7y^2)$ |

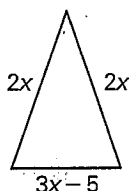
Simplify the expression by combining like terms.

- |                       |                                      |                   |
|-----------------------|--------------------------------------|-------------------|
| 13. $-5x + 2x$        | 14. $22m + (-4m)$                    | 15. $-10x - 8x$   |
| 16. $6 - x + 12$      | 17. $-32 + t + 18$                   | 18. $4 + m + 3m$  |
| 19. $9.2x - 7.9x$     | 20. $\frac{7}{8}x + (-\frac{3}{4}x)$ | 21. $63n - 87n$   |
| 22. $4x^2 + 8x^2 - 7$ | 23. $9a^2 - 5a^2 - 3$                | 24. $4j + 8 - 6j$ |

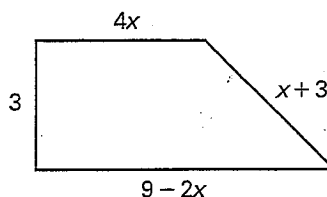
Apply the distributive property. Then simplify by combining like terms.

- |                           |                        |                             |
|---------------------------|------------------------|-----------------------------|
| 25. $2(3x + 1) + x$       | 26. $-2(3a - 5) + 2a$  | 27. $(-4)(5m + 2) - 3m$     |
| 28. $2t^2 + (3 + 5t)(4t)$ | 29. $2x(x + 4) - 5x^2$ | 30. $-2t(4t - 5) + (-5t^2)$ |
| 31. $5 - 2(a + 8)$        | 32. $5x - 2x(x + 7)$   | 33. $-y^3 - 6y(y^2 - y)$    |

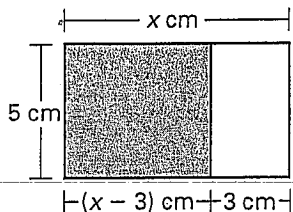
- 34.
- Geometry**
- Write an expression for the perimeter of the triangle shown below.



- 35.
- Geometry**
- Write an expression for the perimeter of the trapezoid shown below.



- 36.
- Geometry**
- Find the area of the shaded rectangle in two different ways. Show how the results are related to the distributive property.



- 37.
- Weight Lifting**
- A weight lifter puts an
- $x$
- pound weight on each side of a bar. A weight 5 pounds heavier than the first is then added to both sides. Finally, a weight 5 pounds heavier than the second weight is added to both sides. The expression
- $2[x + (x + 5) + (x + 2(5))]$
- models the total weight lifted. Simplify the expression. What would the expression be if each added weight was 10 pounds heavier than the previous weight?